COLUMBIA GAS SYSTEM Annual Report 1973

"Is the Energy Crisis Real?"

While the Arab oil embargo has focused national concern on the oil shortage, there is a serious shortage of *all* forms of energy in the face of an ever-increasing demand. While national attention is directed primarily to gasoline, diesel oil, propane and heating oil shortages, there is an existing and worsening shortfall of natural gas supplies. The 1973-74 winter has been significantly warmer than normal thus far, and this has masked the extent and seriousness of the nation's overall energy shortages.

Yes, the energy crisis is real.

Even if all necessary actions were taken promptly, there can be no appreciable relief for three to five years. If such actions are not taken promptly, the situation will become increasingly serious and for a longer period of time.

Thus, the American people and their government leaders must face up to the energy facts of life:

- The days of almost unlimited, low-cost energy are ended.
 As a nation, we must apply ourselves to energy conservation. All available forms of energy must be used wisely and efficiently. The current fine public efforts at conservation must be expanded and continued indefinitely.
- A massive federal energy research and development program must be undertaken to make the United States energy self-sufficient through the use of domestic energy resources by socially and environmentally acceptable means. This calls for a truly cooperative effort by govern-

ment and the private sector. In addition to adequate funding, it must be planned and directed by those with the skill and know-how. This program must have a very high priority among our national goals.

• The energy supply industries—oil, gas, coal, nuclear and electric—must be unshackled from all unnecessary and unrealistic governmental regulations and interference. The return of energy production to the free marketplace is essential if we are to have adequate energy supplies. Also, regulated companies must be allowed more realistic earnings so that the future tremendous increase in capital expenditures can be financed. This will result in higher prices than those that have been artificially set, either directly or indirectly, by government control. Such governmental price control, certainly in the case of natural gas, has been a major cause for the current shortages.

Until higher but proper prices for energy are realized and until governmental control and interference are minimized, the energy crisis will continue to worsen and this nation will be deprived of adequate and reliable supplies of energy to meet the national goals of sound growth and a better quality of life for all our people.

Included in this report are details of the measures which Columbia believes the nation must take and which Columbia is taking to improve the gas supply situation.

Percent of

1973 Highlights

	1973	1972	Increase
Operating Revenues (\$000)	1,048,809	1,016,226	+3.2
Operating Income (\$000)	169,638	153,882	+10.2
Net Income (\$000)	106,230	101,811	+4.3
Net Income Per Share (\$)	3.28*	3.20	+2.5
Dividends Per Share (\$)	1.90	1.82	+4.4
Capital Expenditures (\$000)	218,683	232,181	-5.8
Property, Plant and Equipment (\$000)	2,992,286	2,798,726	+6.9
Capitalization (\$000)	2,085,832	1,990,432	+4.8
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Gas Sales (Million Cubic Feet)		1,422,567	-5.1
Gas Customers	1,859,928	1,858,685	+0.1

^{*} Includes approximately 20 cents per share contingent on final settlement of rate cases

Letter to Stockholders

Net income for the year totaled \$106.2 million, or \$3.28 per share, compared with the 1972 net income of \$101.8 million, or \$3.20 a share. The increase was achieved despite a decline in sales volume resulting largely from the warmest year experienced in Columbia's service area since 1947 when the System-wide recording of degree days began. The 1973 figure represented a new record annual net income which reflected higher rates which are increasingly needed to maintain an adequate rate of return on the System's investment. Part of the 1973 earnings are contingent upon final settlement of rate cases as discussed in the detailed Financial Review section, page 9.

The Board of Directors on January 16, 1974 increased the quarterly dividend rate to 49½ cents per share from the previous 47½ cent rate, making the indicated annual dividend \$1.98 per share. In its action, the Board took into consideration the dividend guidelines of the federal administration's economic policies. This is the twelfth consecutive January in which dividends have been increased. Over this period dividends have been increased 88 cents per slare or 80 percent.

For Columbia the year was one of continued progress in the System's long-range program to develop new gas supplies with which to offset and eventually reverse the continuing decline in supplies from present sources.

Capital expenditures and financing.
Capital expenditures for the year totaled \$219 million, of which \$147 million or 67 percent represented outlays designed to increase System gas supply.
This emphasis on supply projects must continue for a number of years, and while some will not produce immediate income, they are essential.

Columbia sold \$50 million principal

amount of debentures in May at a net annual interest cost of 7.62 percent. It also arranged with four banks for a \$50 million ten year loan which was taken down in full on November 1. Interest on this loan is tied to and fluctuates with the prime rate. This new source of long-term capital provides the System with additional flexibility in its financing arrangements.

Capital expenditures for the year 1974 are estimated at approximately \$340 million, with three-quarters of that sum budgeted for gas supply projects. A large segment of this is planned for acquisition of offshore leases at auctions to be conducted by the Department of the Interior. The degree of success in such auctions is not predictable. In addition a number of financing arrangements currently under consideration for these lease sales may reduce the amount of capital to be invested directly by Columbia. For these reasons, the extent and nature of the System's financing in the year 1974 cannot be determined at this time.

Coal Properties. Further exploratory drilling to proven status on Columbia's some 300,000 acres of coal lands has been deferred pending development of cash flow from the 38,000 acres already explored. As previously indicated, independent engineering reports on that proven acreage indicate the presence of 356 million tons of commercially recoverable coal, which would yield some 204 million tons of low sulfur steam coal.

Extensive studies have now established that it is feasible for Columbia to enter into transactions under which it would acquire control of higher sulfur, lower cost coal reserves which would be satisfactory for gasification, and thus provide lower cost gas, when a process becomes economically feasible. Such reserves can be acquired by exchange of

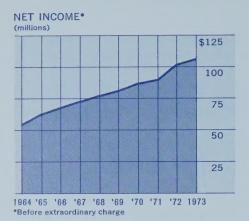
undivided interests in specific tracts, without capital investment by Columbia.

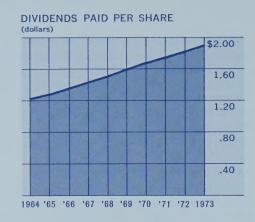
Concurrently, such transactions would make it possible to commence prompt development of mines in Columbia's proven coal reserves. As a result, holdings of coal reserves for future gasification would not be diminished, and Columbia would be acting in the public interest by helping now to meet the nation's critical need for supplemental, long term domestic sources of lower sulfur coal for electric power generation.

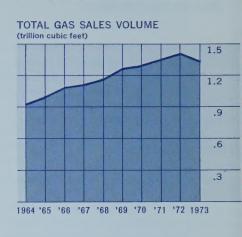
Discussions are now well advanced towards one such transaction which, when finalized, will be subject to approval by the Board of Directors and appropriate federal agencies.

System restructuring. The program to restructure the System distribution, transmission and supply organizations announced in the 1972 Report was put into effect on April 1, 1973. Results of the more effective management organization have already become evident; a reduction of about 600 positions in the System's manning table was achieved; and a substantial saving in operating costs is anticipated after allowance for a three-year write-off of the expenses incurred in implementing the restructuring program.

The System's eight retail distribution companies are now headed by a single management organization headquartered in Columbus, Ohio, rather than being managed as previously from three separate cities—Columbus, Pittsburgh, Pennsylvania and Charleston, West Virginia. Similarly, the management of Columbia Gas Transmission Corporation, which had been divided among those three cities and Wilmington, Delaware, is now centralized in Charleston. All supply development functions are centralized in System headquarters in Wilmington.







Management changes. The System lost the services of a veteran officer and member of the Board of Directors when, in accordance with Columbia's retirement policy, Francis H. Crissman, Vice Chairman of the Board and its Chief Financial Officer since 1956, retired on July 1, 1973, after 43 years of distinguished service with the System. In October, George H. Pringle, former president of The Mead Corporation, resigned for reasons of health after valued service on the Board since May 1963.

In September 1973 Richard A. Rosan was elected a Director, Secretary and General Counsel of the Corporation. He had been a member of the System legal department since 1951 and a Director, Senior Vice President and Counsel of the Service Corporation since 1967.

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The Future

The current estimate of gas supply indicates that until the end of 1976, the System is confronted with a significant

deficiency of supply below the presently restricted demand, even with the production from the Green Springs reforming plant beginning early in 1974. By 1976 the introduction of LNG from Algeria and other projects should ease the situation. After 1976, if proper government action is taken now, the situation should further improve. The rate of improvement will be dependent upon the timeliness of government actions as discussed beginning on page 3.

Efforts to increase supplies of natural and synthetic gas should be given the highest priority because of the clean qualities and high efficiencies of gas in transportation and utilization. In terms of capital investment, the natural gas industry is the sixth largest in the U.S. with more than \$45 billion invested in some 981,000 miles of pipelines and other facilities; it serves over 43 million customers and supplies 32 percent of U. S. total energy requirements.

The outlook for growth in sales for the next few years is not good but in general will not be out of line with the slowdown in the overall growth in the economy caused by the energy crisis. Moreover, at no time in its history has the gas industry been as active in developing gas reserves and expanding its efforts to develop through research more efficient uses and new sources of gas. This is a most encouraging factor in the nation's future.

Thus, it is firmly believed that viewed in its proper perspective, the future for the natural gas industry, and Columbia in particular, is bright. Columbia's fine people have and are displaying their total dedication to achieving this future.

John W. Partridge, Chairman

Bernard J. Clarke, President

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February 15, 1974

The Gas Shortage

The Current Situation

Since 1971, there has been practically no increase in the volume of natural gas available to the interstate pipelines from gas producers. Thus, in the face of a strong demand for increased supplies of natural gas for residential, commercial and industrial uses (natural gas use doubled between 1958 and 1972), the pipelines have not been able in recent years to increase their deliveries, and in fact many have curtailed their deliveries. This was the reason why Columbia was forced in early 1972 to institute a complete freeze on all new demands.

A Federal Power Commission staff report indicates that for the 12 months ended August 1974, curtailments of firm requirements by interstate pipelines will amount to an estimated 1.579 trillion cubic feet of natural gas, the equivalent of about 10 percent of such firm requirements.

Columbia's current estimate is that for the twelve months ended October 31, 1974 deliveries by non-affiliated pipeline suppliers will be curtailed by about 54 billion cubic feet and deliveries from other historic sources will decline approximately 30 billion cubic feet. This total deficiency of 84 billion cubic feet will be offset somewhat by the production of synthetic gas from the new Green Springs reforming plant.

While annual volumes available from historic sources have and will decline in the years immediately ahead, the large volumes of gas available in the winter season from Columbia's large underground facilities will insure reliability of service to its residential and commercial customers. To maintain storage schedules, curtailment of gas sales to industry in the summer months will probably be necessary. Thus,

continuation and improvement of the good voluntary conservation efforts of residential and commercial customers is essential to minimize loss of jobs.

Problems and Solutions

The problems which have caused the increasing shortages of natural gas and the solutions for these problems have been apparent for a long time. Unfortunately, our governmental leaders were not convinced of what they were being told by the energy industries and so far have failed to adopt the necessary solutions to correct the developing problems.

1. Problem—Unrealistic Federal Regulation of Natural Gas Field Prices

Since 1954 when the Supreme Court ordered the Federal Power Commission to fix the price of natural gas at the wellhead. Columbia has warned that such price control efforts would result in a decline in supply. This has proven true. Such regulation resulted in prices not only greatly below true market value but even below the actual costs of exploring and developing new gas supplies. These unrealistically low prices over-stimulated demand for natural gas and discouraged producers from risking their capital to seek new gas reserves. Thus, in the years 1968-72 inclusive, more gas was consumed than was found in the lower 48 states (106 versus 58.5 trillion cubic feet).

Solution: Prompt enactment by Congress of amendments to the Natural Gas Act providing for the orderly deregulation of wellhead prices. Subject to some modifications, the concepts of the Administration's proposals before Congress (S. 2048 and H.R. 7507) will provide for such orderly deregulation. In the long run, natural gas must sell at a price comparable to other convenient fuels such as oil. This will stimulate badly

needed exploratory and development efforts and the cost impact on consumers will be gradual. Eventually, consumers will pay a proper and fair price rather than receive the unwarranted bargains they have had for many years.

2. Problem—Inadequate Availability of Federal Leases

Until recently, the federal lease sale schedule has been inadequate and therefore has reduced the opportunity to explore for new reserves. In addition, environmental groups have delayed sales. For example, there is strong opposition by them to exploration of the outer continental shelf off the Atlantic Coast, which offers great potential.

Solution: The current efforts to expand federal leasing must be accelerated and should include such new promising areas as offshore the Atlantic Coast from North Carolina to Maine and onshore and offshore Alaska. With proper safeguards, which will be utilized, exploration of such areas can be done with minimal, if any, adverse effects on the environment.

3. Problem—Inadequate Energy Research

Compounding the energy shortage is the past and present failure to formulate a comprehensive and aggressive federal energy research and development strategy designed to make available to American consumers large domestic energy reserves including fossil fuels, nuclear fuels, geothermal resources, solar energy, and other unconventional forms of energy.

Solution: The urgency of the nation's critical energy shortages will require a massive federal research, development and demonstration program similar to those undertaken in the Manhattan and NASA projects. Columbia supports legislation for such a program that would:

- A. be conducted by a fresh, new organization, independent of existing entities, priorities and procedures, one which pulls together the present fragmented federal civilian energy research efforts and is charged with overall and specific accountability for meaningful results. It is essential that this program be subject to the least restraints possible, including those partisan and political. It must involve an independent effort by our best talent to do the job that must be done.
- B. be funded on a sustained basis—a trust fund which would provide a minimum of \$2 billion per year for at least ten years. This is essential so that needed funds can be utilized without any time lag and that long-range commitments can be readily made. The usual year-to-year Congressional authorization and appropriation procedure could severely retard proper progress of the program.
- 4. Problem—A Highly Inefficient and Fragmented Governmental Structure with Respect to Federal Energy Policies

Historically the federal governmental structure dealing with energy policies has been badly fragmented—well over sixty separate federal departments and agencies have some control or responsibility for energy policies and execution. The division of authority and the lack of accountability greatly hamper solution of America's energy problems.

Solution: Congress should promptly enact legislation creating a Department of Energy within the Executive Branch. The Department should have sole responsibility and authority for formulating national energy policies and priorities and for directing the execution thereof.

5. Problem—A Highly Unbalanced Approach for Improving the Quality of the Environment

As a nation, it was realized that important steps had to be taken to halt the progressive deterioration in many aspects of the nation's environment and to establish the mechanism for having such environmental concerns considered along with other national goals and objectives when taking federal action.

However, in the four years since the National Environmental Policy Act of 1969 (NEPA) has been implemented, the untoward delays, and in many cases a complete lack of balance between environmental concerns and national energy needs, have resulted in frustrating the efforts of the energy industries to provide additional supplies.

Solution: Congress must promptly review and amend NEPA with particular emphasis on procedural requirements so as to establish the needed balance between the nation's environmental and other essential goals, such as an adequate supply of acceptable energy. This can be done while still maintaining NEPA's basic objectives.

6. Problem—Costly, Inefficient and in Many Cases Counter-Productive Regulatory Procedures for Natural Gas

Unreasonable delays by the Federal Power Commission in processing urgent matters and the current overemphasis on preparation of environmental impact statements are only illustrations of an overall regulatory process that has hindered the gas industry in meeting its responsibilities. This has added incalculable costs to the consumer because of the dollar effect of proceedings and delay upon companies subject to FPC jurisdiction.

Solution: There must be an intensive effort made to streamline and expedite the administrative process. An Executive Task Force is examining the broad problem of regulatory delay. It is important that both the Administration and Congress give this Task Force support and encouragement. As it relates to the gas industry, the nation can no longer afford the delays and cost of current regulatory procedures and practices.

7. Problem—Financing A Vastly Expanded Gas Procurement Program

In developing the needed new sources of gas, both from historic and non-historic sources, the gas industry is confronted with financing that is double or triple past requirements.

Solution: Federal and state regulatory agencies must adopt policies and procedures that will assure significantly higher earnings and cash flow. Only then can the natural gas industry obtain the tremendous sums it requires.

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It is emphasized that even providing the above solutions promptly will not immediately produce significant increases in supply: a minimum of 3-5 years is needed for any appreciable relief; 5-10 years for significant improvements.

Columbia has outlined above an Action Program. It is much the same program announced in April 1972. The passage of time has only made its implementation more urgent. Columbia plans to keep its stockholders, employees and customers advised about specific legislation needed to effect the above solutions, in the hope that they will convey their views to their legislators, which is all important.

Supply Development Program

Columbia's supply efforts are designed to maximize U. S. natural and synthetic gas production and to acquire the minimum amounts of foreign supplies that will be necessary until self-sufficiency is achieved. The goal of energy self-sufficiency is achievable but will require a massive commitment and years to realize.

Liquid Hydrocarbon Reforming

Commercial operations of the reforming plant located at Green Springs, Ohio are expected to begin early in 1974. The plant was completed late in 1973 and has been undergoing testing since that time. The \$44 million plant has a design production capacity of 250 million cubic feet per day of synthetic gas.

The major Green Springs feedstock supply is being obtained under a contract with Dome Petroleum Ltd. of Canada for approximately 40,000 barrels of liquid hydrocarbons daily. Domestic feedstock supplies of up to 20,000 barrels a day that had been contracted for are not available under the priorities initially established by the Mandatory Fuel Allocation Regulations that became effective January 15, 1974. A petition has been filed with the Federal Energy Office for a propane allocation on a hardship basis. Should the feedstock allocation not be granted, Green Springs will initially have sufficient feedstocks to produce only 144 million cubic feet of synthetic gas per

About 85 percent of the price of synthetic gas at the tailgate of the plant is attributable to the price of feedstock. The cost of feedstock, which is tied by escalation clauses to domestic and foreign energy prices, has been spiraling upward in recent months. The price of feedstocks, including the domestic material discussed above, has increased over 50 percent so that the estimated Green Springs tailgate gas cost for the first year of operation

has increased to approximately \$2.00/thousand cubic feet compared with the \$1.40/thousand cubic feet reported in the 1972 annual report. This is typical of the greatly increased costs which Americans will be paying for all forms of energy.

The synthetic gas is being sold at the tailgate of the plant to affiliated and non-affiliated distribution companies served by the System, and transported to those companies by Columbia Gas Transmission Corporation. The Federal Power Commission has approved this transportation service subject only to filing and approval of the transportation rate to be charged.

The status of two other planned synthetic gas plants to be constructed by non-affiliated companies—one by Apco SNG Corporation and the other by Crown Central Petroleum Corporation—has been clouded by the uncertainty of the availability of feedstock supplies resulting from the Mideast oil embargo. Because of this, FPC applications related to both projects have been withdrawn. If reliable sources of feedstock become available, these synthetic gas projects will be reconsidered.

Liquid Natural Gas (LNG) Imports

As previously reported, Columbia has contracted with El Paso Algeria Corporation, a subsidiary of El Paso Natural Gas Company, for LNG from Algeria equivalent to 300 million cubic feet of gas daily. All necessary regulatory approvals for the importation and sale of the LNG were received by March 31, 1973. Shortly thereafter construction began on all phases of the project including the LNG receiving terminal at Cove Point, Maryland. Initial deliveries of gas from the terminal are expected late in 1976.

Ownership of the terminal and pipeline facilities to Loudoun, Virginia is shared with a subsidiary of the Consolidated Natural Gas Company. Columbia is responsible for the construction and operation of the terminal and pipeline.

The Federal Power Commission directed that this LNG be sold under a separate rate schedule. It is believed the price of LNG should be "rolled-in" with other gas prices so that all customers would share alike, in accordance with the Commission's previous long-established policies. Along with other importers of LNG, Columbia has appealed this FPC directive. On December 14, 1973 the case was argued before the U. S. Fifth Circuit Court of Appeals in New Orleans, requesting the court to remand the incremental pricing order to the FPC for reconsideration.

Columbia is actively engaged in negotiations with other potential suppliers of LNG in Nigeria and Venezuela.

Domestic Gas Supplies

Columbia Gas Development Corporation is aggressively exploring for new domestic gas reserves as well as seeking to buy gas from producers. It is estimated that by 1980 over five trillion cubic feet of new reserves onshore and offshore in Southern Louisiana and adjacent areas must be obtained in order to maintain capacity deliveries through Columbia's transmission system from the southwest, which currently delivers about 48 percent of the System's total gas supply.

Exploration on the seven offshore leases acquired by Columbia and its non-affiliated partners in the December 1972 federal lease sale began in February 1973 and is continuing. This drilling has already resulted in several indicated commercial discoveries. While it is too early to determine the full extent of gas that may be developed from these tracts,

the discoveries have justified the ordering of three production platforms at a cost of approximately \$11 million, and the formulation of pipelining plans to move the new gas to shore.

On December 20, 1973 the Department of Interior held a federal lease sale of tracts offshore Mississippi, Alabama and Florida. Columbia and its non-affiliated bidding partners—Gulf, Tenneco, Texaco and Arco-were successful in acquiring nine tracts totaling 51,840 acres for approximately \$169 million, of which Columbia's share is \$56 million. Columbia's interest in the nine tracts varies from 25 percent to 50 percent. The acreage is the first offered for sale in the Mississippi, Alabama and Florida offshore area. While this is a completely wildcat domain, it holds high geological promise. Exploration activity on these tracts is scheduled to begin this spring, subject to the availability of suitable drilling rigs.

The Department of Interior has announced plans for further sales in the Gulf of Mexico in 1974 and Columbia presently plans to participate.

A 20,000-foot deep exploratory well in the Anadarko Basin of Oklahoma in which Columbia has certain gas purchase rights is now being completed as a commercial gas discovery with other wells planned to delineate the extent of the field.

Columbia is also participating in a 21,000 foot exploratory well in Alabama.

Appalachian Basin

Columbia continues a high level of activity in the Appalachian area from which it has historically obtained gas.

Deep horizons offer good potential, and the first well in the joint program with Exxon to explore these horizons under some 500,000 acres held by Columbia in West Virginia is being drilled in Lincoln County. Columbia has the right to all gas found under this program.

In addition to the deeper tests, efforts continue to find Appalachian gas in other prospective producing sands.

Arctic Gas Supplies

Work moved forward in 1973 toward possible delivery of gas to the Columbia service area from Arctic regions, which are expected to be a major future source of supply.

Alaskan potential gas reserves are estimated to be in the order of 350-400 trillion cubic feet. Thirty one trillion cubic feet have been proven, which represents over 11 percent of the total U. S. proven reserves. Most of the proven reserves are located at Prudhoe Bay on the North Slope of Alaska.

The availability of the Prudhoe Bay gas reserves is dependent upon the commencement of oil production in this area.

The Alaskan Pipeline Bill passed by Congress became law on November 16, 1973, and the Department of Interior issued the right-of-way permits on January 23, 1974, for the Trans-Alaskan pipeline which will carry oil from the North Slope to the port of Valdez. It is hoped that this will allow construction of the pipeline project to begin in the spring of 1974, with completion of the line and first oil production scheduled for late 1977.

As previously reported, Columbia has obtained the rights to purchase several trillion cubic feet of natural gas from BP Oil Corporation's proven Prudhoe Bay gas reserves.

The Gas Arctic/Northwest Project Study Group, of which Columbia is a member,

continues planning for a pipeline system to move Alaskan North Slope and Canadian Mackenzie Valley gas reserves through western Canada, southward to the U. S. border. This pipeline, with a design capacity of 4.5 billion cubic feet per day, is estimated to cost \$5.7 billion. The Study Group, consisting of eleven U. S. and sixteen Canadian companies, plans to file applications with appropriate U. S. and Canadian agencies in 1974 for authorization to construct the pipeline.

Columbia is also an active participant in the Northern Border Pipeline Study Group which is made up of six U. S. natural gas transmission companies. This consortium is planning a pipeline estimated to cost \$1.6 billion to deliver Arctic gas from a connection with the Gas Arctic line at the Saskatchewan border to the North Central states and Columbia's service area. Applications for authorization to construct the line are also expected to be made in 1974.

If all governmental authorizations are received in 1975, construction of these gas pipeline systems is scheduled to begin in 1976 with completion in 1979.

Columbia with four producers has been involved in exploration and drilling in the Kemik area of the North Slope. Success with these exploratory activities will supplement Columbia's already significant North Slope gas reserves.

In the Canadian portion of the Arctic Coastal Plain and the Arctic Islands, the potential reserves have been estimated at 260 trillion cubic feet, and approximately twelve trillion cubic feet of proven and probable gas reserves have been discovered to date in these areas.

Approximately nine trillion cubic feet of these reserves are held by Panarctic and the Arctic Islands Gas Development Group, of which Columbia is a one-sixth participant. Each of the Group's U. S. companies has the right to contract for its respective share of the gas reserves discovered and declared available for export by the Canadian National Energy Board.

The joint exploration program with Dome Petroleum Ltd. progressed on 11.1 million net acres of Canadian lands, the majority of which are in the Arctic Islands. The \$60 million joint program is expected to be completed before year-end 1975. Columbia retains a 7½ percent net working interest and the rights to 25 percent of any gas found under the program. During 1973 a major gas discovery was made by Dome on King Christian Island, approximately twenty miles west of an earlier Panarctic gas discovery. Dome and Columbia hold a 100 percent interest in 190,000 acres surrounding its discovery well.

Between 25 and 30 trillion cubic feet of gas reserves are estimated to be needed to support the construction of a large diameter gas pipeline from the Arctic Islands area, south through Canada, and into eastern U. S. markets. Drilling in the Arctic Islands will again be heavy during the 1973-74 winter drilling period with some 23 exploratory and two delineation wells expected to be started.

It is not likely that gas from the Arctic Islands will be available until the mid-1980's.

East Coast Canada Exploration

Geophysical exploration was conducted in 1973 on a 12.7 million acre area off Labrador covered by an agreement between Columbia and three Canadian affiliates of the British Petroleum Company. Columbia will spend \$25 million on a five-year exploration program, in return for which it will earn a 40 percent interest in the acreage.

Columbia will have first call on all natural gas and natural gas liquids produced under this joint venture. The first exploratory well on the offshore acreage is scheduled for the summer of 1974.

Atlantic Offshore Exploration

Progress was made toward eventual exploration and development of the extensive gas and oil reserves believed to lie on the Atlantic Outer Continental Shelf. Development of these resources was endorsed in the President's Energy Message. The federal Council on Environmental Quality conducted a number of public hearings during 1973 in cities along the coast to consider the need for these resources and the potential environmental consequences of their development.

Columbia began geophysical exploration of the Atlantic offshore in 1968 and plans to participate in the federal lease sales which hopefully will be held in this area at an early date.

Norway

During 1973, the System formed a wholly-owned subsidiary, Norwegian Gas Development A/S, for the purpose of acquiring exploration and production licenses covering offshore tracts on the Norwegian Continental Shelf. This subsidiary and its partners are currently negotiating with the Norwegian Government to acquire licenses on three tracts. The objective of this project is to develop sufficient gas reserves to form the basis for an LNG supply from Norway.

Coal Gasification Research

Participation continued in the coal gasification research program sponsored by the federal Office of Coal Research and the American Gas Association designed to accelerate

the commercialization of coal gasification. The program is funded at \$120 million for its first four-year phase, two-thirds of the money coming from the government and one-third from industry. Substantially increased federal support of coal gasification research is needed to supplement funds in the existing joint program which have been eroded by inflation, and to provide for demonstration plants at the earliest practical date.

Initial successes of the joint program include the production of gas of essentially pipeline quality during a nearly week-long run of the Hygas pilot plant in Chicago.

Columbia is also participating in other coal gasification research programs. One is a large scale test of a process to upgrade to pipeline quality gas the low-heating value gas produced directly by coal gasifiers. This is being conducted in conjunction with 14 other energy companies at a commercial Lurgi coal gasification plant at Westfield, Scotland. Results to date are very encouraging.

Energy Utilization

The growing awareness of the energy crisis that appeared to be developing at the end of 1973 brought with it a recognition of the need to further improve the efficiency of energy utilization and to conserve all available energy supplies. As the year ended, energy conservation was identified as an essential national commitment.

Among customers. Through its home economists, servicemen and engineers, Columbia has long had a program to educate customers on the most efficient use of their appliances. As the dimensions of the gas supply situation became more evident in 1972, this conservation effort was extended into advertisements, bill inserts, posters and other media, and in 1973 the effort was expanded significantly.

Through newspapers, television and radio, Columbia stressed the theme "Gas is precious—pure energy. Use it wisely," and delivered practical suggestions on cutting down gas use in all major domestic applications. More than 60 percent of the System's total advertising budget in 1973 was devoted to such messages, the balance being used to inform customers of the programs Columbia has underway to develop new supplies.

Recent computer studies to measure the effect of conservation efforts on System requirements for residential and commercial heating, comparing previous winter periods with the same periods in the current winter and adjusting for differences in weather, indicate usage reductions of about six percent. These studies cover relatively short periods of time. Longer periods must be examined to accurately determine the degree to which customers are cutting back gas usage, but the figures to date clearly indicate that our efforts to encourage customer conservation are producing results.

Through personal individual contacts and special seminars, commercial and industrial customers have been encouraged to conserve gas and have their usage analyzed to eliminate wasteful practices. Columbia industrial engineers are working directly with customers advising on ways to conserve energy.

System conservation. Practicing what it preaches, the System undertook a sweeping examination of all its operations to further tighten its long-standing program to avoid energy waste. It adopted strict measures for further reductions in energy consumption wherever possible without reducing operational efficiency.

The energy conservation measures recommended by the federal government's program became in

many instances just the starting point for System efforts.

Propane sales. The program to market propane at retail to those unable to obtain natural gas because of Columbia's sales freeze encountered restrictions of its own in 1973 because of the general energy shortage.

By July 1973 Columbia had contracted to supply approximately 4,000 residential customers, 1,000 commercial customers and 200 industrial accounts, although only about 1,500 customers had been connected by December 31, 1973. All of these will be able to convert easily to natural gas when supplies are available.

These sales, however, had committed all of the propane produced by the System as well as that supplied by outside sources under long-term contract. As a result, well before the federal government imposed a Mandatory Propane Allocation Program in October, a freeze on further propane sales was imposed by the System.

Columbia presently markets approximately 53 million gallons of propane yearly to residential, commercial and industrial customers, sales equivalent to 4.8 billion cubic feet of natural gas.

Net income for the year was \$106.2 million, an increase of \$4.4 million or 4.3 percent over 1972, despite the warmest weather experienced in the System territory in more than 25 years. Degree days, which are a measure of heating weather, were 799 or 14 percent less than those for 1972 and 599 or 11 percent lower than normal. Earnings per share were \$3.28 in 1973 compared with \$3.20 in 1972, based on average shares outstanding of 32,430,612 and 31,847,279, respectively. As explained in Note 3(A) to Financial Statements, approximately 20 cents of the 1973 earnings per share is contingent on final settlement of rate cases where collections are made subject to refund.

Sales totaled 1.35 trillion cubic feet, a decrease of 5.1 percent from 1972. In addition to the milder weather, the volumes sold also reflected complete sales restrictions which were placed into effect pursuant to approval by State regulatory commissions by the latter part of 1972. Revenues reflecting higher rates for both retail and wholesale customers totaled \$1.05 billion, an increase of 3.2 percent over 1972.

The volume of gas purchased decreased by 6.3 percent, but because supplier rates increased, the cost of gas purchased in 1973 was lower by only 2.6 percent.

The rising cost of labor, material and supplies caused continued upward pressure on operating expenses despite efforts by the System in controlling such costs. The System had fewer employees at the end of the year than at the end of 1972. This resulted in slowing the rate of increase in labor costs to only 2 percent over the previous year. Materials and other expenses increased by only a nominal amount.

Provision for depreciation and depletion increased by 8.4 percent reflecting higher accrual rates and greater investment in property. Taxes other than income increased 6.7 percent.

Income taxes increased 26.9 percent

principally as a result of increased taxable income and the deferring of tax reductions which are related to certain exploration and development costs. This is a change in accounting from that followed in prior years and is explained in Note 2 to Financial Statements.

Interest expense was 11.2 percent greater than for the previous year. While the major portion of this increase was attributable to new long-term debt issued during 1972 and 1973, short-term interest rates reached record levels during 1973.

During 1973 the Corporation realized a total of \$100 million from the sale in May of \$50 million principal amount of debentures and a ten-year bank loan obtained in November, also in the amount of \$50 million. Since approximately \$94 million of debt was retired in 1973, the System financial position was strengthened by an increase in retained earnings of \$44.6 million while debt outstanding increased only nominally. The Corporation continued to use commercial paper for short-term financing with \$106 million outstanding at September 30, 1973, and none at the close of the year.

In order to provide flexibility in future financing, an application has been filed with the Securities and Exchange Commission for authorization to amend the Corporation's Certificate of Incorporation so as to increase the authorized shares of common stock from 39,500,000 to 50,000,000 and of preferred stock from 500,000 to 10,000,000 and to conform the rights and privileges of the preferred stock with the SEC's Statements of Policy with respect thereto. Upon approval by the SEC, the Corporation will furnish details to shareholders and request their approval of the proposed amendment to the Certificate of Incorporation.

Rate Activity

During 1973, the System placed into effect wholesale rate increases amounting to approximately \$95,200,000 annually.

Of this amount, approximately \$37,200,000 is final and \$58,000,000 is being collected subject to refund.

In addition, wholesale rate increases of approximately \$30,600,000 became effective January 1, 1974 in accordance with the Purchased Gas Adjustment Clause. As explained in Note 4(A) to Financial Statements, a favorable order was received from the Federal Power Commission permitting cost of service treatment of the advance payment made to BP Oil Corporation.

Pipeline suppliers placed into effect during the year rate increases amounting to approximately \$17,800,000 annually to the System. At year end, additional increases amounting to approximately \$56,000,000 were pending. These increases in cost of gas have been or will be recovered through the application of the Purchased Gas Adjustment Clause.

In addition to recovering increases in cost of gas purchased in all state jurisdictions except one, System distribution companies increased their retail rates by approximately \$20,400,000 annually. Also, annual increases of approximately \$1,600,000 were being collected subject to refund and \$6,100,000 was pending but not yet being collected.

Board of Directors' Audit Committee

The Audit Committee composed of six outside directors held meetings in March, November and December, 1973 and in February, 1974, with Columbia's independent auditors attending (except the December meeting), and held separate meetings with the System's internal auditor and accounting personnel.

The Committee has reported to the Board of Directors that based upon such independent investigation it is satisfied that the accounting procedures of the System are proper and the income statements and balance sheets reflect fairly Columbia's results of operations and financial position.

Directors and Officers

DIRECTORS

Fred W. Batten

Senior Vice President

Thomas S. Blair

President, Blair Strip Steel Company

New Castle, Pa.

Bernard J. Clarke

President

Warren W. Clute, Jr.

Chairman of the Board, Watkins Salt

Company

Watkins Glen, N. Y.

Robert F. Duemler

Senior Vice President

Frank J. Durzo

President, Jeffrey Galion, Inc.

Columbus, O.

J. Robert Fletcher

President and Chairman of the Board, J. H. Fletcher & Co., Huntington, W. Va.

Robert H. Hillenmeyer

Hillenmeyer Nurseries, Lexington, Ky.

Cecil E. Loomis

Former Chairman of the Board

George P. MacNichol, III

Vice President, Libbey-Owens-Ford Co.

Toledo, O.

John W. Partridge

Chairman of the Board

John P. Roche

President, American Iron and Steel Institute

New York, N. Y. Richard A. Rosan

Secretary and General Counsel

Arch A. Sproul

President, Virginia International Co. Staunton, Va.

John N. Stauffer

President, Juniata College, Huntingdon, Pa.

John L. Thomas

President, Thomas, Field & Co.

Charleston, W. Va.

DIRECTORS EMERITUS

John C. Baker

Essex Fells, N. J.

Ray M. Evans

Charleston, W. Va.

Edward A. Livingstone

Beaver, Pa.

George P. MacNichol, Jr.

Toledo, O.

J. Harrison McNash

Wheeling, W. Va.

Edward S. Pinney

New York, N. Y Theodore F. Smith

Ligonier, Pa.

George S. Young

Pittsburgh, Pa.

OFFICERS

John W. Partridge

Chairman of the Board

Bernard J. Clarke

President

Fred W. Batten

Senior Vice President

Robert F. Duemler

Senior Vice President

John P. Cornell

Vice President

Richard A. Rosan

Secretary and General Counsel

Philip W. Frick

Treasurer

Michael J. Prylucki

Assistant Secretary

Leland B. Roth

Assistant Treasurer

OPERATING COMPANY **EXECUTIVES**

Ashland Group Companies

Joseph A. Brake

President

Columbia Coal Gasification Corporation

R. F. Duemler

President

Columbia Distribution Companies

W. Frederick Laird

Chairman of the Board

M. E. White

President

Columbia Gas Transmission Corporation

James G. McKee

Chairman of the Board

William W. Ferrell

President

Columbia Gulf Transmission Company

John W. Kelley

President

Columbia Supply Companies

S. Orlofsky

President

Columbia Gas System **Service Corporation**

OFFICERS

John W. Partridge

Chairman of the Board

Bernard J. Clarke

President.

Fred W. Batten

Senior Vice President

John P. Cornell

Senior Vice President

Robert F. Duemler

Senior Vice President

S. Orlofsky

Senior Vice President

Richard A. Rosan

Senior Vice President, Secretary and

General Counsel

Robert C. Austin Vice President

Edward D. Callahan

Vice President

Philip W. Frick

Vice President

William C. Hart

Vice President

William T. Lynam

Vice President

Hart T. Mankin Vice President and Assistant General Counsel

Charles W. Uhlinger

Vice President

Robert L. Wegerle

Vice President

Richard C. Wolfe

Vice President

Alexander P. McCann

Treasurer

Stanley C. Kauffman

Controller

Michael J. Prvlucki

Assistant Secretary

Larry J. Bainter

Assistant Treasurer

Leslie A. Field, Jr. Assistant Treasurer

Leland B. Roth

Assistant Treasurer

Lewis B. Herbert

Assistant Controller C. P. McCoy

Assistant Controller

George W. Watson

Assistant Controller

George E. Crawford General Auditor

Statements of Consolidated Income

Years Ended December 31, 1973 and 1972

	1973	1972*
Operating Revenues	(Thou	sands)
Gas (Note 3)	\$1,039,468	\$1,009,992
Other	9,341	6,234
Total operating revenues	1,048,809	1,016,226
Operating Expenses		
Purchased gas	450,300	462,363
Other operation	154,726	149,792
Maintenance	33,350	32,663
Provision for depreciation and depletion	99,580	91,837
Provision for income taxes (Notes 1, 2 and 5)	76,491	65,055
Other taxes	64,724	60,634
Total operating expenses	879,171	862,344
Operating Income	169,638	153,882
Other Income		
Investment credit, including amortization (Note 5)	7,649	9,471
ferred income taxes of \$1,667,000 in 1973 (Note 2)	7,137	4,211
Discount on debentures purchased for sinking fund (Note 3)	5,270	4,713
Interest and other—net ./	2,767	7,054
Total other income	22,823	25,449
Income Before Interest Charges	192,461	179,331
Interest Charges		
Debentures	70,448	63,199
Other long-term debt	6,393	4,150
Short-term bank loans and commercial paper	7,434	6,476
Other interest expense	1,956	3,695
Total interest charges	86,231	77,520
Net Income (Notes 2 and 3)	\$ 106,230	\$ 101,811
Net Income Per Share of Common Stock	\$ 3.28	\$ 3.20
Dividends Per Share of Common Stock	\$ 1.90	\$ 1.82
Average Shares Outstanding (thousands)	32,431	31,847

^{*} Reclassified to conform with 1973 presentation.

Consolidated Balance Sheets

December 31, 1973 and 1972

December 31, 1973 and 1972	1973	1972
		sands)
ASSETS	`	,
Property, Plant and Equipment at original cost Less accumulated provision for depreciation and depletion Net property, plant and equipment	\$2,992,286 (958,469) 2,033,817	\$2,798,726 (864,437) 1,934,289
Gas Supply Advances and Investments (Note 4) Advances approved for inclusion in rate base	134,503 96,830 231,333	62,438 144,159 206,597
Current Assets Cash (Note 6) Temporary cash investments, at cost which approximates market Accounts receivable—	47,541 6,537	51,724 73,602
Gas Merchandise, principally installment contracts, less unearned carrying charges of \$3,273,000 in 1973 and \$4,265,000 in 1972 Other Less accumulated provision for doubtful accounts	85,508 11,317 10,804 (1,646)	92,146 15,061 12,897 (1,744)
Gas in underground storage—current inventory, at cost (last-in, first-out basis) Material and supplies, at average cost Prepayment for synthetic gas feedstock Other Total current assets	77,084 $17,222$ $17,601$ $17,679$ $289,647$	59,195 16,810 — 18,250 — 337,941
Deferred Charges Property taxes applicable to subsequent year's operations Debt expense, being amortized Capital stock expense Other Total deferred charges	12,227 3,060 3,399 23,373 42,059 \$2,596,856	11,684 3,104 3,386 22,490 40,664 \$2,519,491
CAPITALIZATION AND LIABILITIES		
Capitalization (see Statements of Consolidated Capitalization) Stockholders' equity Long-term debt Total capitalization	\$ 890,598 1,195,234 2,085,832	\$ 845,988 1,144,444 1,990,432
Current Liabilities Bank loans (Note 6) Long-term debt—current maturities Accounts payable Accrued taxes Accrued interest Rate refunds Other Total current liabilities	100,198 42,674 112,445 65,117 21,716 3,850 23,904	148,866 39,056 110,913 57,119 20,469 26,641 20,779 423,843
Deferred Credits Accumulated provision for deferred income taxes Accumulated deferred investment credits, being amortized Deferred rate refunds Advances for and contributions in aid of construction Other Total deferred credits	84,821 31,796 9,882 5,856 8,765 141,120 \$2,596,856	53,885 33,216

Statements of Consolidated Capitalization

December 31, 1973 and 1972

	1973		1972	
Stockholders' Equity		(Thousands)		
Common stock, \$10 par value, 39,500,000 shares au-				
thorized: 32,430,612 shares outstanding (a) (e).	\$ 324,306		\$ 324,306	
Balance of amounts paid in in excess of par value (a).	117,905		117,905	
Retained earnings, \$354,000,000 not available for	,			
cash dividends at December 31, 1973 (Note 3)	448,222		403,611	
Minority interest in a subsidiary company	165		166	
Total stockholders' equity (b) (e)	890,598	42.7%	845,988	42.5%
Long-Term Debt				
The Columbia Gas System, Inc.				
Debentures (c)				
Maturities Interest Rates				
1974-1979 3% to 5%	116,300		135,900	
1980-1983 35% % to 5%	91,120		96,810	
1985-1989 43% % to 51% %	180,350		188,820	
1990-1994 45% % to 9%	254,725		264,700	
1995-1998 7½% to 9½%	445,000		395,000	
	1,087,495		1,081,230	
Less unamortized debt discount, less premium	(5,610)		(5,309)	
	1,081,885		1,075,921	
Subordinated bank loans (Note 6)	60,000		60,000	
Term bank loans (d)	45,000			
Miscellaneous debt of subsidiary companies	8,349		8,523	
Total long-term debt	1,195,234	57.3	1,144,444	57.5
Total capitalization	\$2,085,832	100.0%	\$1,990,432	100.0%

- (a) In June, 1972, the Corporation sold 1,400,000 shares of its common stock, \$10 par value at \$28.502 per share. Of the \$39,902,000 proceeds from this sale, \$14,000,000 was credited to the Common Stock account and the balance of \$25,902,000 was credited to the Balance of Amounts Paid In In Excess of Par Value account.
- (b) The Corporation has 500,000 shares of preferred stock, \$50 par value, authorized but unissued.
- (c) The composite annual interest rate on the debentures outstanding as of December 31, 1973 is 6.32% and the current annual interest requirement on debentures is \$71,100,000.
- (d) The term bank loans, issued November 1, 1973, are due in semi-annual installments through 1983 and bear interest at the rate of 115% of the prime bank rate plus ¼ of 1%.
- (e) The Corporation has filed an application with the Securities and Exchange Commission to amend its Certificate of Incorporation to increase the authorized number of shares of common stock to 50,000,000 and preferred stock to 10,000,000.

Statements of Consolidated Retained Earnings

Years Ended December 31, 1973 and 1972

	1973	1972	
	(Thousands)		
Balance at beginning of year	\$403,611	\$359,551	
Net income	106,230	101,811	
Cash dividends—\$1.90 per share in 1973 and \$1.82 per share in 1972	(61,619)	(57,751)	
Balance at end of year, \$354,000,000 not available for cash dividends at December 31, 1973 (Note 3)	<u>\$448,222</u>	\$403,611	

Statements of Consolidated Funds Used for Capital Expenditures

Years Ended December 31, 1973 and 1972

	1973	1972
	(Thous	sands)
Funds from Operations		
Net Income	\$106,230	\$101,811
Less—Dividends on common stock	(61,619)	(57,751)
	44,611	44,060
Expenses not requiring use of cash:		
Depreciation and depletion—	00.500	01.027
Charged to income	99,580	91,837
Charged to other accounts	816	899
Deferred income taxes—net	27,901	10,676
Deferred investment credits—net	(1,361)	(1,068)
Total funds from operations	171,547	146,404
Funds from Financing		20.002
Issuance of common stock	100.000	39,902
Issuance of long-term debt	100,000	170,000
Retirement of long-term debt	(45,291)	(136,579)
Short-term borrowings (repayments)—	(10 660)	52 116
Bank loans—net	(48,668)	53,446
Commercial paper—net	6,041	(44,000) 82,769
Total funds from financing	0,041	82,709
Other		
Cash and temporary cash investments	71,248	(70,082)
Accounts receivable	12,377	(14,658)
Gas in underground storage	(17,889)	7,748
Prepayment for synthetic gas feedstock	(17,601)	7,740
Accounts payable	1,532	54,181
Accrued taxes and interest	9,245	7,001
Rate refunds—current and deferred	(12,909)	12,191
Miscellaneous—net	(4,908)	6,627
Total other	41,095	3,008
Funds Used for Capital Expenditures (a)	\$218,683	\$232,181

⁽a) Includes gas supply advances and investments and allowance for funds used and interest during construction.

The accompanying Notes to Financial Statements are an integral part of these statements.

Auditors' Report

Arthur Andersen & Co.

1345 Avenue of the Americas New York, New York 10019

To the Stockholders of The Columbia Gas System, Inc.:

We have examined the consolidated balance sheets and statements of consolidated capitalization of The Columbia Gas System, Inc. (a Delaware corporation) and subsidiary companies as of December 31, 1973 and 1972, and the related statements of consolidated income, retained earnings and funds used for capital expenditures for the years then ended. Our examinations were made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, subject to the effect of such adjustments to the 1973 financial statements, if any, as may be required upon settlement of the matters discussed in Note 3 to financial statements, the accompanying consolidated financial statements present fairly the financial position and capitalization of The Columbia Gas System, Inc. and subsidiary companies as of December 31, 1973 and 1972, and the results of their operations and funds used for capital expenditures for the years then ended, in conformity with generally accepted accounting principles which, except for the change (with which we concur) in the method of accounting for certain income tax benefits as described in Note 2 to financial statements, were consistently applied during the periods.

arthur andersen + Co.

Notes to Financial Statements

December 31, 1973 and 1972

(1) Statement of Significant Accounting Policies

The following is a description of the significant accounting policies and practices:

- (A) Consolidation. The consolidated financial statements include the accounts of the Corporation and all subsidiaries. With the exception of a minority interest in one Appalachian production company, all companies are wholly owned. Inter-company transactions have been eliminated.
- (B) Property, Plant and Equipment and Related Depreciation and Depletion. Property, plant and equipment of the Corporation's subsidiaries operating as regulated public utilities is stated at the historical cost of construction. Such costs include payroll related costs such as taxes, pensions and other fringe benefits, general and administrative costs and allowance for funds used during construction. The rate for such allowance was 9 percent in 1973 and 8½ percent in 1972.

The Corporation's subsidiaries subject to the jurisdiction of the Federal Power Commission (FPC) (for leases acquired after October 7, 1969) and its two subsidiaries primarily engaged in exploring for and developing reserves of hydrocarbons (principally natural gas), one in the United States and one in Canada, follow the full cost method of accounting for their gas producing properties. Under this method of accounting, all productive and nonproductive well drilling costs, as well as other costs incident to the acquisition, exploration and development of such properties and, in the case of the two exploration and development subsidiaries, carrying costs of certain investments in exploration projects prior to the commencement of production (see Note 2), are capitalized but not in excess of amounts estimated to be realized through the production and sale of hydrocarbons.

The Corporation's subsidiaries provide depreciation on a composite straightline basis in amounts which, in the opinion of management, are adequate for the purpose of providing for the recovery of the original cost of the properties over their estimated lives. The annual consolidated provisions for depreciation, based upon the average of depreciable properties at the beginning and end of each year, were 3.6% in 1973 and 3.5% in 1972. Provisions for depletion and amortization of well costs and other costs capitalized under the full cost method of accounting have been based on a unit rate applied to the quantity of gas and oil produced. Lease acquisition and exploration costs relating to properties in the process of exploration are not included in depletion computations until such time as exploration is substantially completed.

(C) Income Taxes. The Corporation's gas wholesale subsidiaries provide for deferred income taxes resulting from claiming liberalized depreciation and the shorter property lives under the Class Life System-Asset Depreciation Range (ADR) for tax purposes. From 1966 to 1971, however, it had been the general practice for these subsidiaries to pass on to their customers such tax deferrals in the determination of rates. The accumulated provision for deferred income taxes is being used to offset the increase in tax expense which results when straight-line tax depreciation exceeds liberalized tax depreciation on a vintage year basis.

The Corporation's gas distribution subsidiaries claim liberalized depreciation for tax purposes and pass on the resulting tax deferrals to their customers in accordance with the policies of the regulatory commissions of the states in which they operate. Certain of these subsidiaries do not claim the shorter property lives under ADR. However, those that do use ADR provide de-

ferred taxes on the resulting tax deferrals.

The wholesale and distribution subsidiaries also expense for tax purposes certain costs such as interest and taxes which have been capitalized for accounting and rate purposes. This practice and the flow-through of tax deferrals resulting from liberalized depreciation by the distribution subsidiaries and by the wholesale subsidiaries during the period from 1966 to 1971, results in a deferment of a cost to the future. However, management expects that these increased income taxes will be allowed as a cost by the applicable regulatory commissions in future rate determinations.

Income taxes of the subsidiaries subject to the jurisdiction of the FPC have also been reduced due to tax deductions taken for certain intangible drilling and other exploration costs which are capitalized as plant to be amortized over the productive lives of the properties for accounting purposes.

Provisions for deferred income taxes resulting from tax deductions taken for intangible drilling and certain other exploration costs by the Corporation's two exploration and development subsidiaries have been made by charges to income beginning in 1973; prior to 1973 such tax deductions served to reduce the income tax provisions (see Note 2).

Reference is made to Note 5 for the components of and additional information relating to income taxes.

(D) Investment Credits. The Corporation's gas distribution subsidiaries, which are amortizing the investment tax credit to operating expense, have generally deferred the job development investment credit and under the option available under the 1971 Revenue Act are amortizing it ratably over the useful life of the property to operating expense.

The Corporation's other subsidiaries follow the "flow-through to earnings" method of accounting for the job development investment credit provided by the 1971 Revenue Act. The investment tax credit which had been deferred by such other subsidiaries is being amortized to "Other Income."

- **(E)** Gain on Reacquisition of Debt. The Corporation follows the policy of crediting gain on reacquisition of debt to "Other Income" as such debt is repurchased.
- (F) Retirement Income Plan. The Corporation has a trusteed, non-contributory Retirement Income Plan which, with certain minor exceptions, covers all regular employees between the ages of 25 and 65 years who have had one year of continuous service. Retirement income is based on the number of years of an employee's service and on his annual rate of compensation. The Corporation's policy is to fund pension costs accrued which amounted to \$6,200,000 in 1973 and \$6,100,000 in 1972. As of December 31, 1973 the value of the Retirement Income Fund exceeded the actuarially computed value of vested benefits based on the unit credit method.

(2) Change in Accounting Policy

In 1973, the Securities and Exchange Commission (SEC) approved for a two-year period commencing January 1, 1973, the Corporation's request to permit it an exception to a rule under the Public Utility Holding Company Act of 1935, which rule requires the allocation of tax reductions caused by subsidiaries having losses for income tax purposes to those subsidiaries which have taxable income (in the case of the Corporation, primarily regulated public utilities). The SEC order provides that the Corporation's exploration and development subsidiaries, which in 1973 have significant losses for income tax purposes caused by intangible drilling and other exploration costs, are to receive the tax benefit of such costs and are to defer such benefit to be amortized in the future as the related costs are amortized. In accordance with this order, deferred income taxes amounting to \$12,700,000 have been provided in 1973. In 1972, similar tax benefits of these subsidiaries amounting to \$4,400,000 were "flowed through to earnings."

Concurrent with this change in accounting, the cost of carrying certain investments in exploration projects prior to the commencement of production, and on which deferred taxes are now being provided, is being capitalized at a rate equal to the debt portion (5 percent) of the Corporation's overall allowance for funds used during construction rate. These capitalized carrying costs, after deferred income taxes, amounted to \$1,800,000 in 1973. Carrying costs of similar investments were not significant in years prior to 1973.

The net effect of providing deferred income taxes and capitalizing carrying costs was to decrease 1973 net income by \$10,900,000 or \$.34 per share of common stock.

(3) Regulatory Matters

(A) Rate Matters. In September, 1973, the Corporation's gas wholesale subsidiaries increased their rates and began collecting the increases in revenue subject to refund. The increase in rates will result in increased annual revenues of approximately \$58,000,000. Revenues and net income in the accompanying 1973 financial statements have been increased by \$14,300,000 and \$5,700,000, respectively, as a result of such increased rates.

In addition, 1973 revenues include \$1,600,000 and net income has been increased by \$900,000 resulting from a gas distribution subsidiary's rate increase which is being collected subject to refund.

(B) Rulemaking. On February 11,

1974 the FPC issued an Opinion and Order in the accounting rulemaking proceeding involving gains on reacquisition of debt. The Order requires the deferral of gains on reacquisition of debt (commencing January 1, 1973) and subsequent amortization over the remaining life of the related debt as a reduction of interest cost and reaffirms the FPC rate-making position that gains on reacquisition of debt are to be considered in determining the overall cost of embedded debt. The accounting ordered differs from the Corporation's accounting policy as set forth in Note 1(E) and the rate treatment reflected in the gas wholesale subsidiaries' rates which have been determined in accordance with an FPC rate order issued in 1970. The February 11 Order covers only the accounting for gains if incurred by subsidiaries subject to the jurisdiction of the FPC (such subsidiaries had no gains), and, therefore, does not pertain directly to the gains realized by the Corporation (\$5,270,000 in 1973) on the reacquisition of its debentures for sinking fund purposes. The accounting for this gain being followed by the Corporation is in accordance with that prescribed by the Securities and Exchange Commission for public utility holding companies.

If the February 11 order were applied to the consolidated financial statements and the rate making policy of the FPC with respect to the gas wholesale subsidiaries described above were to be conformed to the order, approximately \$3 million of such 1973 gains would be deferred. However, the FPC has been requested to change the effective date of the order to January 1, 1974, and the Corporation plans no change in its present accounting with respect to these gains until the FPC has acted and the matter can be thoroughly studied. Therefore, it is not possible at this time to determine what, if any, effect the resolution of this matter will have on the consolidated financial statements.

(4) Gas Supply Advances and Investments

In an effort to augment the gas supply of the System, certain subsidiary companies of the Corporation have made substantial advance payments to various companies engaged in the exploration and development of gas and oil leases in Southern Louisiana, Appalachian, Alaskan and Canadian areas and the Gulf of Mexico and have acquired leases and are participating in joint ventures for similar exploration and development activities. The following is a description of certain major advances and investments:

(A) Alaska and Canada. A gas wholesale subsidiary, Columbia Gas Transmission Corporation (TCO), in 1971, entered into a contract with BP Oil Corporation (BP Oil) for the rights to purchase gas from BP Oil's proven but undeveloped oil and gas reserves on the Alaskan North Slope. Under the terms of the contract, TCO is to advance \$200,000,000 to BP Oil. As of December 31, 1973, \$60,000,000 has been advanced, on which \$8,800,-000 of interest had been accrued. No additional advances are required until certain government approvals have been obtained. Repayment by BP Oil of the advance and accrued interest is to be made out of the proceeds from the sale of crude oil from the proven reserves covered by such BP Oil leases which will commence upon completion of the Trans-Alaskan pipeline scheduled for late 1977. TCO received permission from the FPC in 1973 to include the \$60,000,000 advance in its rate base; accordingly, net income has been increased in 1973 by \$4,000,000 of which \$2,600,000 is applicable to prior years.

Additional advances and investments approximating \$44,400,000 (\$39,000,000 of which has been included in the property accounts) have been made by a subsidiary, Columbia Gas Development of Canada Ltd. (CCA), for exploration and development in Canada

including significant amounts for exploration in the Arctic Islands. While CCA's interests in discovered reserves and undeveloped lands are adequate to recover CCA's investment, ultimate recoverability of the Arctic Islands investments is dependent upon development of pipeline or other delivery systems.

(B) Gulf of Mexico. In 1972, an exploration and development subsidiary, Columbia Gas Development Corporation (CGD), entered into an agreement with Energy Ventures, Inc. (Energy) under which agreement CGD and Energy are participating in a joint venture (Coleve) to acquire oil and gas leases at Federal or state lease sales and to engage in the exploration for and development and production of gas, oil and other minerals. As of December 31, 1973, CGD has contributed \$30,800,000 to Coleve representing its 50 percent equity participation and Energy has contributed \$79,800,000 to Coleve, of which \$50,-000,000 is in the form of an advance. Pursuant to this joint venture agreement, Energy has the option to convert its advance into an additional equity position, which would serve to decrease CGD's equity participation, or to require CGD to contribute to Coleve funds sufficient for Coleve to repay one-third of the \$50,000,000 advance in each of the years 1977, 1978 and 1979, with no increase in its equity participation. CGD has also agreed to purchase production payments from Coleve in an amount equal to the interest (130 percent of the prime bank rate) that Energy is reguired to pay on a \$50,000,000 bank loan it has outstanding, to the extent Energy does not receive interest or "net earnings" from Coleve. Such production payments will bear interest at the prime rate in effect from time to time. As of December 31, 1973, production payments of approximately \$4,900,000 have been purchased by CGD pursuant to this provision. CGD is entitled to

certain income tax deductions generated by Coleve on a current basis, initially not to exceed its equity investment. The income tax benefit of such tax deductions in 1973 amounted to \$3,900,000, which amount has been deferred by CGD (see Note 2). However, CGD will receive distributions from Coleve only after Energy has received distribution of "net earnings" of \$37,500,000.

CGD also has a 12.3 percent equity participation in another joint venture (Forest Venture) which was entered into in 1972 with Forest Oil Corporation (Forest). As of December 31, 1973, CGD's equity participation in this venture amounted to \$4,500,000. In addition, CGD has advances of \$28,-000,000 due from Forest which includes accrued interest. This advance is to be repaid in amounts equal to 175 percent of the exploration and development expenditures incurred by the Forest Venture. All such exploration and development expenditures (which amounted to \$2,300,000 at December 31, 1973) are to be advanced by CGD.

The sole activities of Coleve and the Forest Venture as of December 31. 1973, are as parties in a joint bidding group which holds interests in seven leases in offshore Louisiana acquired in the December, 1972, Federal lease sale and which are in the process of exploration. Coleve's portion of development drilling on these leases, estimated to be \$35,000,000, will be advanced by TCO. There are not sufficient reserve data available at this time to definitely determine the reserves underlying these properties. Additional drilling will be required before definitive reserves determination can be made.

In addition to these advances and investments, CGD acquired an interest in nine leases in the Gulf of Mexico at a cost of \$55,800,000 in the December, 1973, Federal lease sale. Such amount is included in the property accounts.

	(5) Income Taxes	A. Components of Provision for Income Taxes	1973	1972
	The provision for income taxes shown			isands)
	in the accompanying financial state- ments consists of the components set	Included in operating expenses:	#20.052	
	forth in table A.	Currently payable— Federal State	\$39,053	\$41,139
	Deferred tax expense results from	Total	4,916	4,837
	timing differences in the recognition	Deferred— Federal	43,969	45,976
	of revenues and expense for tax and	State	25,385 849	9,859 817
	accounting purposes. The source of these differences and the tax effect of	Total	26,234	10,676
	each is as indicated in table B.	Investment credits—Provision	6,608	8,697
	The total provision for income taxes	Amortization	(320)	(294)
	shown in the accompanying financial	Total	6,288	8,403
	statements is less than the amount	Total included in operating expenses	76,491	65,055
	which would be computed by applying the statutory Federal income tax rate	Included in other income:		
	to income before income tax. Table C	Deferred— Federal	1,667	_
	summarizes the major reasons for this	Investment credits— Provision not deferred.	(5,705)	(7,522)
	difference.	Amortization	(1,944)	(1,949)
	It is not expected that the cash outlay	Total	(7,649)	(9,471)
	for income taxes will exceed income	Total included in other income	(5,982)	(9,471)
	tax expense in any of the next three years.	Total provision for income taxes	\$70,509	\$55,584
	B. Components of Provision for Deferred	Income Taxes		
	1		1973	1972
	Excess of liberalized tax depreciation	(including ADR) over straight-line tax	(Thousa	inas)
	depreciation		\$ 12,808	\$ 10,676
		exploration costs expensed for tax purposes ing purposes by exploration and development		
	companies (Note 2)		12,731	, -
		purposes which are capitalized for accounting		
			1,667	_
			695	
	Total provision for deferre	ed income taxes	\$ 27,901	\$ 10,676
	C. Reconciliation from "Expected" Tax	Expense to Book Provision for Income Taxes	1973	1972
			(Thousa	
	Book income before provision for in	come taxes	\$176,739	\$157,395
		t 48%	\$ 84,835	\$ 75,550
	Increases (reductions) in taxes result			
		ral income tax benefit	3,255	3,197
		additions placed in service during year and not	(5.705)	(7.500)
	Amortization of investment are		(5,705) (2,264)	(7,522) (2,243)
		dit deferred in prior years other exploration costs capitalized for account-	(2,204)	(2,243)
			(4,055)	(8,280)
		ased for sinking fund—The Corporation has		
		s of its investments in its subsidiaries	(2,529)	(2,262)
		ring construction capitalized by subsidiaries		
		ic utilities which does not constitute taxable	(0.850)	(0.001)
		• • • • • • • • • • • • • • • • • • • •	(2,559)	(2,021)
		• • • • • • • • • • • • • • • • • • • •	(469)	(835)
	Total provision for income	e taxes	\$ 70,509	\$ 55,584
1 2				

(6) Compensating Balances and Short-Term Borrowings

In connection with the advance to BP Oil Corporation discussed in Note 4(A), the Corporation entered into a credit agreement with six commercial banks to borrow up to the aggregate of \$200,000,000 (subordinated bank loans) at 1/4 percent above the prime bank rate adjusted daily. The Agreement requires a commitment fee of 1 percent annually on the balance of the commitment (\$140,000,000 during 1972 and 1973). In addition, the Corporation is required to maintain an average of 20 percent compensating balance on certain portions of the bank loan outstanding and 10 percent on certain portions of the unused bank loan commitment. At December 31, 1973, such average compensating balance requirements approximated \$20,-800,000. There are no legal restrictions on the withdrawal of such funds.

The Corporation borrows funds from various sources on a short-term basis from time to time to meet specific needs of the Corporation and its subsidiaries. These loans, in the form of bank loans and/or commercial paper, are usually outstanding for periods of one to seven months. The maximum amount of bank loans and/or commercial paper outstanding at any one time during the year ended December 31, 1973 amounted to \$130,000,000, the monthly average amounted to \$75,300,000, the interest rate applicable to the 1973 loans ranged from 53/4 to 101/8 percent and the weighted average interest rate during the year was 8.23 percent. It is the Corporation's practice, in connection with certain of these bank loans, to maintain an average of 20 percent compensating balances on bank loans outstanding and 10 percent on unused bank lines of credit. Such compensating balances approximated \$10,900,000 at December 31, 1973. There are no legal restrictions on the withdrawal of such funds.

In addition, various subsidiaries borrow funds from banks on a short-term basis to meet certain other needs. The maximum amount of these bank loans outstanding at any one time during the year ended December 31, 1973 amounted to \$13,900,000, the monthly average amounted to \$12,000,000, the interest rate applicable to the 1973 loans ranged from 6 to 10½ percent and the weighted average interest rate during the year was 7.88 percent. It is the subsidiaries' practice, in connection with certain of these bank loans, to maintain compensating balances up to 20 percent of the amounts outstanding. Such compensating balances approximated \$300,000 at December 31, 1973. There are no legal restrictions on the withdrawal of such funds.

(7) Lease Rentals

Rentals of leased property, other than rents applicable to non-operating production property, of \$1,300,000 and \$1,200,000 were charged directly to expense in 1973 and 1972, respectively, and \$14,600,000 and \$14,400,000 were charged to other accounts, principally clearing accounts, the majority of which is ultimately charged to expense.

Minimum rental commitments under "non-cancellable" leases other than

rents applicable to non-operating production property as of December 31, 1973 are as follows:

Period				Amount
				(Thousands)
1974		 	 	 \$ 9,500
1975		 	 	 7,300
1976		 	 	 5,600
1977		 	 	 4,100
1978		 		 3,400
1979-	1983	 	 	 13,500
1984-1	1988	 	 	 9,400
1989-	1993	 	 	 5,000
After	1993	 		 1,300

As of December 31, 1973, the present value of the minimum lease commitments under non-capitalized financing leases was less than 5 percent of the Corporation's consolidated capitalization. If all non-capitalized financing leases had been capitalized and the related assets were amortized on a straight-line basis and interest was accrued on the basis of the outstanding lease liability, the effect on 1973 net income would be less than 3 percent of the average of net income for the years 1971 to 1973.

(8) Commitments

Capital expenditures for 1974 are estimated at \$340,000,000 excluding any additional advances that may be made to BP Oil Corporation under terms of the contract explained in Note 4(A). In addition to Note 4 above, reference is made to the foregoing report to stockholders for additional information relating to capital expenditures and commitments including those applicable to gas supply.

FINANCIAL Farmings—(Thousands)	Comparative Statistical Data—1963 to 1973	1973	1972	1971
Operating Revenues	FINANCIAL			
Purchased Gas	Earnings—(Thousands)			
Operating Expenses and Taxes 428,871 399,981 368,941 Operating Income 169,638 153,882 153,882 154,885 Interest on Long-Term Debt 76,841 67,349 61,546 Income Before Extraordinary Charge* 106,230 101,811 89,999 Income Per Share (Dollars) 3,28 3,20 2,90 Dividends Paid Per Share (Dollars) 51,99 56,99 64,2% Cuptidization—(Thousands) 57,9% 56,99 64,2% Common Stock Equity 8,80,598 845,988 762,023 Long-Term Debt—excluding Current Maturities 8,208,583 1,195,234 1,144,444 1,015,576 Total Capitalization—excluding Current Maturities \$2,085,33 1,199,323 1,191,4444 1,015,576 Total Capitalization—excluding Current Maturities \$2,982,286 \$2,798,726 \$2,664,059 Property, Plant and Equipment—(Thousands) \$2,992,286 \$2,798,726 \$2,664,059 Investment \$2,992,286 \$2,798,726 \$2,664,059 Less Accumulated Provision for Depreciation and Deple				\$ 926,786
Coperating Income	Purchased Gas	450,300	462,363	415,960
Interest on Long-Term Debt	Operating Expenses and Taxes		399,981	368,941
Income Before Extraordinary Charge* 106,230 101,811 89,999 1.00 3.28 3.20 2.90	Operating Income			141,885
Tricome Per Share (Dollars)* 3.28 3.20 2.90				
Dividends Paid Per Share (Dollars) 1.82 5.69% 64.2%				
Dividends Paid Per Share (Dollars) 1.90 5.1.90 56.9% 56.2% 56.9% 64.2%	Income Per Share (Dollars)*	3.28	3.20	2.90
Dividend Payout Ratio 57,9% 56,9% 64,2%	Dividends			
Common Stock Equity	Dividends Paid Per Share (Dollars)		\$ 1.82	\$ 1.76
Common Stock Equity	Dividend Payout Ratio	57.9%	56.9%	64.2%
Common Stock Equity	Capitalization—(Thousands)			
Long-Term Debt—excluding Current Maturities S2,085,832 \$1,990,432 \$1,777,599 \$1,777,599 \$1,990,432 \$1,777,599 \$1,990,432 \$1,777,599 \$1,990,432 \$1,777,599 \$1,990,432 \$1,990,432 \$1,777,599 \$1,990,432 \$1,777,599 \$1,990,432 \$1,990,432 \$1,777,599 \$1,990,432 \$1,990,432 \$1,777,599 \$1,990,432 \$1,990,432 \$1,777,599 \$1,990,432 \$1,990,432 \$1,990,432 \$1,888 \$2,798,726 \$2,664,059 \$2,982,869 \$64,437 \$78,1124 \$1,084 \$1,934,289 \$1,882,935 \$1,882,935 \$1,882,935 \$1,882,935 \$1,882,935 \$1,882,935 \$1,882,935 \$1,882,935 \$1,882,935 \$1,882,935 \$1,882,935 \$1,882,935 \$1,882,935 \$1,882,935 \$1,882,935 \$1,882,935 \$1,990,433 \$1,990,432 \$1,990,433 \$1,990,43		\$ 890,598	\$ 845,988	\$ 762,023
Total Capitalization—excluding Current Maturities		1,195,234		
Investment			\$1,990,432	\$1,777,599
Investment	Property, Plant and Equipment—(Thousands)			
Less Accumulated Provision for Depreciation and Depletion S58,469 864,437 781,124 Nct \$2,033,817 \$1,934,289 \$1,882,935 \$1,882,935 \$1,863 \$232,181 \$315,165 \$1,000 \$1		\$2,992,286	\$2,798,726	\$2,664,059
Net \$2,033,817 \$1,934,289 \$1,882,935 Capital Expenditures—(Thousands) \$218,683 \$232,181 \$315,165 Capital Expenditures—(Thousands) \$218,683 \$232,181 \$315,165 Capital Expenditures—(Thousands) \$200,000 Residential and Commercial \$430,125 \$442,843 \$408,508 Industrial \$229,077 \$220,865 \$198,943 Wholesale \$371,272 \$339,547 \$307,200 Other \$8,994 \$6,737 \$4,816 Total \$1,039,468 \$1,009,902 \$919,467 Sales—(Million Cu. Ft.) \$392,362 \$45,671 \$413,171 Industrial \$346,227 \$360,138 \$350,612 Wholesale \$610,824 \$635,015 \$595,781 Other \$1,053 \$1,743 \$2,292 Total \$1,350,466 \$1,422,567 \$1,361,856 Degree Days \$4,877 \$5,676 \$5,353 Maximum Day \$8,007 \$8,329 \$8,269 At System Average Temperature of \$180 \$-10 \$40 Customers at Year End \$8,007 \$8,329 \$8,269 At System Average Temperature of \$1,772,883 \$1,767,173 \$1,731,320 Non-Heating \$8,3385 \$87,677 \$94,368 Industrial \$3,435 \$3,607 \$3,648 Wholesale \$95 98 \$103 Other \$130 \$130 \$154 Total \$1,859,928 \$1,858,655 \$1,829,593 Sources of Gas—(Million Cu. Ft.) \$1,311,068 \$1,334,483 \$1,268,076 Appalachian \$1,771,980 \$7,320 \$7,320 \$7,320 Produced \$95 99,201 \$107,719 Produced \$1,311,068 \$1,334,483 \$1,268,076 Appalachian \$1,771,980 \$7,320 \$7,320 \$7,320 Produced \$3,460 \$7,380 \$7,325 Capital System Average Courbest \$1,311,068 \$1,334,483 \$1,268,076 Appalachian \$1,771,980 \$7,325 \$1,268,076 Appalachian \$7,071,99 \$7,325 \$1,071,99 Produced \$3,460 \$7,380 \$7,325				
Capital Expenditures—(Thousands) \$218,683				
Revenues—(Thousands) Residential and Commercial \$430,125 \$442,843 \$408,508 Industrial 229,077 220,865 198,943 Wholesale 371,272 339,547 307,200 Other 8,994 6,737 4,816 Total \$1,039,468 \$1,009,992 \$919,467 Sales—(Million Cu. Ft.) Residential and Commercial 392,362 425,671 413,171 Industrial 346,227 360,138 350,612 Wholesale 610,824 635,015 595,781 Other 1,053 1,743 2,292 Total 1,350,466 1,422,567 1,361,856 Degree Days 4,877 5,676 5,353 Maximum Day Sendout—(Million Cu. Ft.) 8,007 8,329 8,269 At System Average Temperature of 18° -1° 4° Customers at Year End Residential and Commercial 4,275,77 4,368 Industrial 3,435 3,607 3,648 Wholesale 95 98 103 Other 130 130 154 Total 1,859,928 1,858,685 1,829,593 Sources of Gas—(Million Cu. Ft.) 1,311,068 1,334,483 1,268,076 Appalachian 76,719 91,201 107,719 Produced 84,602 73,800 79,325		\$ 218 683		\$ 315 165
Residential and Commercial \$430,125 \$442,843 \$408,508 Industrial 229,077 220,865 198,943 371,272 339,547 307,200 Other 8,994 6,737 4,816 Total \$1,039,468 \$1,009,992 \$919,467 \$1,053 1,743 2,292 \$1,255 1,255	Capital Experience—(Thousands)	Ψ 210,000	Ψ 232,101	Ψ 515,105
Residential and Commercial \$ 430,125 \$ 442,843 \$ 408,508 Industrial 229,077 220,865 198,943 Wholesale 371,272 339,547 307,200 Other 8,994 6,737 4,816 Total \$1,039,468 \$1,009,992 \$ 919,467 Sales—(Million Cu. Ft.) 8 8 \$1,009,992 \$ 919,467 Sales—(Million Cu. Ft.) 392,362 425,671 413,171 110 <	GAS OPERATIONS			
Residential and Commercial \$ 430,125 \$ 442,843 \$ 408,508 Industrial 229,077 220,865 198,943 Wholesale 371,272 339,547 307,200 Other 8,994 6,737 4,816 Total \$1,039,468 \$1,009,992 \$ 919,467 Sales—(Million Cu. Ft.) 8 8 \$1,009,992 \$ 919,467 Sales—(Million Cu. Ft.) 392,362 425,671 413,171 110 <	Revenues—(Thousands)			
Wholesale 371,272 339,547 307,200 Other 8,994 6,737 4,816 Total \$1,039,468 \$1,009,992 \$919,467 Sales—(Million Cu. Ft.) 392,362 425,671 413,171 Industrial 346,227 360,138 350,612 Wholesale 610,824 635,015 595,781 Other 1,053 1,743 2,292 Total 1,350,466 1,422,567 1,361,856 Degree Days 4,877 5,676 5,353 Maximum Day Sendout—(Million Cu. Ft.) 8,007 8,329 8,269 At System Average Temperature of 18° -1° 4° Customers at Year End Residential and Commercial 1,772,883 1,767,173 1,731,320 Non-Heating 1,772,883 1,767,173 1,731,320 Non-Heating 83,385 87,677 94,368 Industrial 3435 3,607 3,648 Wholesale 95 98 103		\$ 430,125	\$ 442,843	\$ 408,508
Other 8,994 6,737 4,816 Total \$1,039,468 \$1,009,992 \$ 919,467 Sales—(Million Cu. Ft.) Residential and Commercial 392,362 425,671 413,171 Industrial 346,227 360,138 350,612 Wholesale 610,824 635,015 595,781 Other 1,053 1,743 2,292 Total 1,350,466 1,422,567 1,361,856 Degree Days 4,877 5,676 5,353 Maximum Day Sendout—(Million Cu. Ft.) 8,007 8,329 8,269 At System Average Temperature of 18° -1° 4° Customers at Year End Residential and Commercial 1 1,772,883 1,767,173 1,731,320 Non-Heating 83,385 87,677 94,368 1 1 3,435 3,607 3,648 Wholesale 95 98 103 0 1 1 1 1 1 1 1 1 1 <th>Industrial</th> <th>229,077</th> <th>220,865</th> <th>198,943</th>	Industrial	229,077	220,865	198,943
Total	Wholesale	371,272	339,547	307,200
Sales—(Million Cu. Ft.) Residential and Commercial 392,362 425,671 413,171 Industrial 346,227 360,138 350,612 Wholesale 610,824 635,015 595,781 Other 1,053 1,743 2,292 Total 1,350,466 1,422,567 1,361,856 Degree Days 4,877 5,676 5,353 Maximum Day Sendout—(Million Cu. Ft.) 8,007 8,329 8,269 At System Average Temperature of 18° -1° 4° Customers at Year End Residential and Commercial 4 4 4° Heating 1,772,883 1,767,173 1,731,320 Non-Heating 83,385 87,677 94,368 Industrial 3,435 3,607 3,648 3,435 3,607 3,648 Wholesale 95 98 103 154 1 130 154 Total 1,859,928 1,858,685 1,829,593 1,859,928 1,858,685 1,829,593<				
Residential and Commercial 392,362 425,671 413,171 Industrial 346,227 360,138 350,612 Wholesale 610,824 635,015 595,781 Other 1,053 1,743 2,292 Total 1,350,466 1,422,567 1,361,856 Degree Days 4,877 5,676 5,353 Maximum Day Sendout—(Million Cu. Ft.) 8,007 8,329 8,269 At System Average Temperature of 18° -1° 4° Customers at Year End Residential and Commercial 1 1,772,883 1,767,173 1,731,\$20 Non-Heating 83,385 87,677 94,368 Industrial 3,435 3,607 3,648 Wholesale 95 98 103 Other 130 130 154 Total 1,859,928 1,858,685 1,829,593 Sources of Gas—(Million Cu. Ft.) 1,311,068 1,334,483 1,268,076 Appalachian 76,719 91,201 107,719	Total	\$1,039,468	\$1,009,992	\$ 919,467
Industrial 346,227 360,138 350,612 Wholesale 610,824 635,015 595,781 Other 1,053 1,743 2,292 Total 1,350,466 1,422,567 1,361,856	Sales—(Million Cu. Ft.)			
Wholesale Other 610,824 (35,015) (3	Residential and Commercial	392,362	425,671	413,171
Other 1,053 1,743 2,292 Total 1,350,466 1,422,567 1,361,856 Degree Days 4,877 5,676 5,353 Maximum Day	Industrial			350,612
Total 1,350,466 1,422,567 1,361,856 Degree Days 4,877 5,676 5,353 Maximum Day Sendout—(Million Cu. Ft.) 8,007 8,329 8,269 At System Average Temperature of 18° -1° 4° Customers at Year End Residential and Commercial 1,772,883 1,767,173 1,731,320 Non-Heating 83,385 87,677 94,368 Industrial 3,435 3,607 3,648 Wholesale 95 98 103 Other 130 130 154 Total 1,859,928 1,858,685 1,829,593 Sources of Gas—(Million Cu. Ft.) Purchased—Southwest 1,311,068 1,334,483 1,268,076 Appalachian 76,719 91,201 107,719 Produced 84,602 73,800 79,325				
Degree Days 4,877 5,676 5,353 Maximum Day Sendout—(Million Cu. Ft.) 8,007 8,329 8,269 At System Average Temperature of 18° -1° 4° Customers at Year End Residential and Commercial Heating 1,772,883 1,767,173 1,731,320 Non-Heating 83,385 87,677 94,368 Industrial 3,435 3,607 3,648 Wholesale 95 98 103 Other 130 130 154 Total 1,859,928 1,858,685 1,829,593 Sources of Gas—(Million Cu. Ft.) Purchased—Southwest 1,311,068 1,334,483 1,268,076 Appalachian 76,719 91,201 107,719 Produced 84,602 73,800 79,325				
Maximum Day Sendout—(Million Cu. Ft.) 8,007 8,329 8,269 At System Average Temperature of 18° -1° 4° Customers at Year End Residential and Commercial 1,772,883 1,767,173 1,731,320 Non-Heating 83,385 87,677 94,368 Industrial 3,435 3,607 3,648 Wholesale 95 98 103 Other 130 130 154 Total 1,859,928 1,858,685 1,829,593 Sources of Gas—(Million Cu. Ft.) 1,311,068 1,334,483 1,268,076 Appalachian 76,719 91,201 107,719 Produced 84,602 73,800 79,325	Total	1,350,466	1,422,567	1,361,856
Sendout—(Million Cu. Ft.) 8,007 8,329 8,269 At System Average Temperature of 18° -1° 4° Customers at Year End Residential and Commercial Heating 1,772,883 1,767,173 1,731,320 Non-Heating 83,385 87,677 94,368 Industrial 3,435 3,607 3,648 Wholesale 95 98 103 Other 130 130 154 Total 1,859,928 1,858,685 1,829,593 Sources of Gas—(Million Cu. Ft.) Purchased—Southwest 1,311,068 1,334,483 1,268,076 Appalachian 76,719 91,201 107,719 Produced 84,602 73,800 79,325	Degree Days	4,877	5,676	5,353
At System Average Temperature of 18° -1° 4° Customers at Year End Residential and Commercial Heating 1,772,883 1,767,173 1,731,320 Non-Heating 83,385 87,677 94,368 Industrial 3,435 3,607 3,648 Wholesale 95 98 103 Other 130 130 154 Total 1,859,928 1,858,685 1,829,593 Sources of Gas—(Million Cu. Ft.) 1,311,068 1,334,483 1,268,076 Appalachian 76,719 91,201 107,719 Produced 84,602 73,800 79,325	Maximum Day			
Customers at Year End Residential and Commercial Heating 1,772,883 1,767,173 1,731,320 Non-Heating 83,385 87,677 94,368 Industrial 3,435 3,607 3,648 Wholesale 95 98 103 Other 130 130 154 Total 1,859,928 1,858,685 1,829,593 Sources of Gas—(Million Cu. Ft.) 1,311,068 1,334,483 1,268,076 Appalachian 76,719 91,201 107,719 Produced 84,602 73,800 79,325	Sendout—(Million Cu. Ft.)	8,007	8,329	8,269
Residential and Commercial Heating 1,772,883 1,767,173 1,731,320 Non-Heating 83,385 87,677 94,368 Industrial 3,435 3,607 3,648 Wholesale 95 98 103 Other 130 130 154 Total 1,859,928 1,858,685 1,829,593 Sources of Gas—(Million Cu. Ft.) 1,311,068 1,334,483 1,268,076 Appalachian 76,719 91,201 107,719 Produced 84,602 73,800 79,325	At System Average Temperature of	18 °	-1°	4°
Heating 1,772,883 1,767,173 1,731,320 Non-Heating 83,385 87,677 94,368 Industrial 3,435 3,607 3,648 Wholesale 95 98 103 Other 130 130 154 Total 1,859,928 1,858,685 1,829,593 Sources of Gas—(Million Cu. Ft.) 1,311,068 1,334,483 1,268,076 Appalachian 76,719 91,201 107,719 Produced 84,602 73,800 79,325	Customers at Year End			
Non-Heating 83,385 87,677 94,368 Industrial 3,435 3,607 3,648 Wholesale 95 98 103 Other 130 130 154 Total 1,859,928 1,858,685 1,829,593 Sources of Gas—(Million Cu. Ft.) 1,311,068 1,334,483 1,268,076 Appalachian 76,719 91,201 107,719 Produced 84,602 73,800 79,325	Residential and Commercial			
Industrial 3,435 3,607 3,648 Wholesale 95 98 103 Other 130 130 154 Total 1,859,928 1,858,685 1,829,593 Sources of Gas—(Million Cu. Ft.) Purchased—Southwest 1,311,068 1,334,483 1,268,076 Appalachian 76,719 91,201 107,719 Produced 84,602 73,800 79,325	Heating	1,772,883	1,767,173	1,731,320
Wholesale 95 98 103 Other 130 130 154 Total 1,859,928 1,858,685 1,829,593 Sources of Gas—(Million Cu. Ft.) Purchased—Southwest 1,311,068 1,334,483 1,268,076 Appalachian 76,719 91,201 107,719 Produced 84,602 73,800 79,325		83,385	87,677	94,368
Other 130 130 154 Total 1,859,928 1,858,685 1,829,593 Sources of Gas—(Million Cu. Ft.) Purchased—Southwest 1,311,068 1,334,483 1,268,076 Appalachian 76,719 91,201 107,719 Produced 84,602 73,800 79,325		3,435	3,607	
Total 1,859,928 1,858,685 1,829,593 Sources of Gas—(Million Cu. Ft.) Purchased—Southwest 1,311,068 1,334,483 1,268,076 Appalachian 76,719 91,201 107,719 Produced 84,602 73,800 79,325				
Sources of Gas—(Million Cu. Ft.) Purchased—Southwest 1,311,068 1,334,483 1,268,076 Appalachian 76,719 91,201 107,719 Produced 84,602 73,800 79,325				
Purchased—Southwest 1,311,068 1,334,483 1,268,076 Appalachian 76,719 91,201 107,719 Produced 84,602 73,800 79,325		1,859,928	1,858,685	1,829,593
Appalachian				
Produced				
10tal				
	Total	1,472,389	1,499,484	1,455,120

-	1970	1969	1968	1967	1966 1965		1964	1963
\$	822,782	\$ 773,517	\$ 706,856	\$ 683,082	\$ 669,187	\$ 632,577	\$ 592,901	\$ 578,599
	363,245	348,748	315,103	305,273	306,059	283,242	265,638	259,980
	330,697	307,481	286,735	276,074	265,909	258,308	243,821	239,011
	128,840	117,288	105,018	101,735	97,219	91,027	83,442	79,608
	51,311	41,628	35,675	32,438	31,128	29,398	26,452	25,495
	86,825	81,489	77,045	72,500	68,361	63,574	56,857	52,882
	2.80	2.66	2.53	2.39	2.26	2.10	1.87	1.75
\$	1.68	\$ 1.60	\$ 1.52	\$ 1.44	\$ 1.36	\$ 1.28	\$ 1.22	\$ 1.16
	60.0%	60.2%	60.1%	60.3%	60.2%	61.0%	67.0%	66.3%
\$	731,635	\$ 697,199	\$ 656,959	\$ 625,200	\$ 595,522	\$ 566,938	\$ 541,675	\$ 523,428
0.4	961,298	857,211	782,837	727,492	728,857	715,589	659,648	593,768
\$1	,692,933	\$1,554,410	\$1,439,796	\$1,352,692	\$1,324,379	\$1,282,527	\$1,201,323	\$1,117,196
\$2	,484,832	\$2,312,014	\$2,116,623	\$1,962,742	\$1,899,477	\$1,796,638	\$1,691,282	\$1,570,904
	718,211	665,347	610,032	560,934	517,627	466,022	418,994	386,005
\$1	,766,621	\$1,646,667	\$1,506,591	\$1,401,808	\$1,381,850	\$1,330,616	\$1,272,288	\$1,184,899
\$	239,361	\$ 195,990	\$ 174,009	\$ 85,076	\$ 113,024	\$ 109,929	\$ 139,477	\$ 95,934
\$	377,406	\$ 356,083	\$ 327,837	\$ 318,308	\$ 309,890	\$ 288,436	\$ 280,566	\$ 278,267
	168,401	159,080	143,797	135,252	134,430	124,944	108,861	102,323
	264,428	247,718	221,668	218,484	214,450	208,233	192,743	186,847
	4,942	3,422	5,674	3,283	3,639	3,373	4,005	4,202
\$	815,177	\$ 766,303	\$ 698,976	\$ 675,327	\$ 662,409	\$ 624,986	\$ 586,175	\$ 571,639
	403,164	394,282	369,551	358,023	346,385	325,362	319,698	315,264
	323,458	315,757	292,322	268,232	265,064	245,412	211,640	195,059
	571,219	550,260	509,898	490,159	490,231	453,625	407,397	393,355
	3,016	2,060	1,502	1,196	1,230	763	633	621
1	,300,857	1,262,359	1,173,273	1,117,610	1,102,910	1,025,162	939,368	904,299
4	5,590	5,767	5,721	5,651	5,799	5,465	5,315	5,924
	8,000	6,873	6,830	6,591	6,432	6,002	5,472	5,804
	-1°	0,873 14°	0,830 8°	8°	6°	9°	15°	-2°
	•		o,	-				
1	1,690,347	1,652,064	1,574,817	1,536,132	1,496,889	1,458,001	1,419,900	1,371,355
	103,260	115,816	109,591	114,175	124,931	135,618	145,331	156,913
	3,661	3,786	3,364	3,243	3,127	2,985	2,826	2,724
	102	106	107	107	107	107	106	111
	157	176	175	200	245	258	278	285
1	,797,527	1,771,948	1,688,054	1,653,857	1,625,299	1,596,969	1,568,441	1,531,388
1	1,196,506	1,129,063	1,057,720	1,017,669	992,447	924,143	847,705	820,187
	106,213	93,175	90,305	72,357	74,825	70,109	67,829	69,642
	83,224	68,907	73,964	71,559	68,199	76,536	66,001	71,730
1	,385,943	1,291,145	1,221,989	1,161,585	1,135,471	1,070,788	981,535	961,559

Columbia Gas System

20 Montchanin Road Wilmington, Delaware 19807

Columbia's System

Columbia is one of the largest natural gas systems in the United States and is composed of a parent holding company, a service company and the 18 operating subsidiaries listed on this page. The subsidiary companies are engaged primarily in the production, purchase, transmission, storage and distribution of natural gas at retail and wholesale.

Columbia supplies through affiliated and non-affiliated retail companies the gas requirements of over 4,000,000 customers, roughly 10 percent of the gas customers in the United States. Its service area includes large parts of Ohio, Pennsylvania, West Virginia, Maryland, Virginia, Kentucky and New York and the District of Columbia.

The Columbia Gas System, Inc. was incorporated under the laws of Delaware on September 30, 1926, and was a result of the consolidation of two utility systems, one of which dated back to 1906.

A book providing more detailed operating, financial and statistical data is now being prepared for later distribution to those requiring more detailed data on system operations in 1973. Requests for copies may be addressed to "Year Book," Public Relations Department, The Columbia Gas System, Inc., 20 Montchanin Road, Wilmington, Delaware 19807.

Columbia Gas System Companies

The Columbia Gas System, Inc.

20 Montchanin Road, Wilmington, DE 19807

Columbia Gas System Service Corporation Columbia Coal Gasification Corporation Columbia Gas Development Corporation Columbia Gas Development of Canada Ltd.

Columbia LNG Corporation Norwegian Gas Development A/S



Ashland Group Companies

340-17th Street, Ashland, KY 41101

Columbia Hydrocarbon Corporation The Inland Gas Company, Inc.

Columbia Distribution Companies

99 North Front Street, Columbus, OH 43215

Columbia Gas of Kentucky, Inc.
Columbia Gas of Maryland, Inc.
Columbia Gas of New York, Inc.
Columbia Gas of Ohio, Inc.
Columbia Gas of Pennsylvania, Inc.
Columbia Gas of West Virginia, Inc.
The Ohio Valley Gas Company

Columbia Gas Transmission Corporation

1700 MacCorkle Ave., SE, Charleston, WV 25314

Big Marsh Oil Company

Columbia Gulf Transmission Company

3805 West Alabama Avenue, Houston, TX 77027

Transfer Agents

Bankers Trust Company, New York
Mellon Bank N.A., Pittsburgh
Continental Illinois National Bank and
Trust Company of Chicago
Bank of America National Trust and Savings
Association, San Francisco
National Trust Company, Ltd., Toronto

Registrars

Morgan Guaranty Trust Company of New York Pittsburgh National Bank, Pittsburgh The First National Bank of Chicago Wells Fargo Bank, San Francisco Crown Trust Company, Toronto